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**OPERABLE UNIT 3 OUTLINE FOR REVISION TO
INITIAL SCREENING OF ALTERNATIVES REPORT
MAY 1991**

05-01-91

**4
ENCLOSURE**

1469

**OPERABLE UNIT 3
OUTLINE FOR REVISION TO
INITIAL SCREENING OF ALTERNATIVES REPORT**

May 1991

Executive Summary

Modify as necessary in accordance with the revisions which follow.

1.0 Introduction

- a. Update Site Background information
- b. Add summary of current/planned removal actions
- c. Update description/definition of OU-3
- d. Add new suboperable units (SUs) to address tanks, bulk waste, stored product and/or in-service underground pipes/lines
- e. Redefine SUs, for example:
 - 1) SU-U Subsurface Equipment/Utilities/Facilities
 - 2) SU-V Stored Product
 - 3) SU-W Stored Bulk Waste
 - 4) SU-X Soils
 - 5) SU-Y Facilities/Aboveground Contaminants
 - 6) SU-Z Perched Groundwater

2.0 Introduction to Screening of Alternatives

- a. Update Point of Compliance and preliminary (or final, if available) RAOs to conform to EPA/DOE agreements
- b. Add current remediation goals for contaminants of concern
- c. General Response Actions expanded to the following:
 - 1) No Action
 - 2) Containment/Control
 - 3) Treatment/Decontamination
 - 4) Removal
 - 5) Collection
 - 6) Demolition
 - 7) Disposal
 - 8) Discharge
 - 9) Disposition

3.0 Initial Screening of Technologies and Detailed Evaluation of Process Options

- a. Modify initial identification of technology types and process options to include:
 - 1) Capping
 - 2) Subsurface Barrier
 - 3) Facility Control Barrier
 - 4) Storm Water Management
 - 5) Perched Groundwater Extraction
 - 6) Perched Groundwater Treatment
 - 7) Physical/Chemical Soil Treatment
 - 8) Packaging
 - 9) Thermal Treatment

- 10) On-Site Waste Disposal
- 11) Off-Site Transportation and Off-Site Waste Disposal
- 12) Discharge
- 13) Extraction of Source
- 14) Facility Removal
- 15) Solids Processing
- 16) Metals Decontamination
- 17) Stabilization/Vitrification
- 18) In Situ Treatment
- b. Update the initial screening of technologies with the most current information on process options
- c. Add section for detailed evaluation of process options
 - 1) Only applies for process options that survive the initial screening of technologies
 - 2) Evaluation will focus on effectiveness, implementability, and cost as described in CERCLA guidance
 - 3) Process options will be deleted, retained for alternative development, or retained for further evaluation (if necessary, to further examine an innovative process option, or a special application of a process option)

4.0 Development of Alternatives

- a. Total rewrite from Nov 90 ISA
- b. Assemble/describe 23 alternatives already in work for "existing scope" of OU-3
 - 1) No Action
 - 2) Multilayer Cap
 - 3) Multilayer Cap, In Situ Vitrification
 - 4) In Situ Vitrification
 - 5) Mechanical Removal, On-Site Disposal
 - 6) Mechanical Removal, Off-Site Removal
 - 7) Mechanical Removal, Soil Washing, On-Site Disposal
 - 8) Mechanical Removal, Plasma Arc Incineration, On-Site Disposal
 - 9) Mechanical Removal, Soil Washing, Plasma Arc Incineration, On-Site Disposal
 - 10) Mechanical Removal, Soil Washing, Off-Site Disposal
 - 11) Mechanical Removal, Plasma Arc Incineration, Off-Site Disposal
 - 12) Mechanical Removal, Soil Washing, Plasma Arc Incineration, Off-Site Disposal
 - 13) Slurry Wall
 - 14) Slurry Wall, In Situ Vitrification
 - 15) Slurry Wall, Perched Groundwater Extraction, Perched Groundwater Treatment, Discharge
 - 16) Perched Groundwater Extraction, Perched Groundwater Treatment, Discharge
 - 17) Perched Groundwater Extraction, Selective Perched Groundwater Treatment, Discharge
 - 18) Demolition or Mechanical Removal, On-Site Disposal
 - 19) Demolition or Mechanical Removal, Off-Site Disposal
 - 20) Demolition or Mechanical Removal, Pelletized CO₂ Blasting, On-Site Disposal
 - 21) Demolition or Mechanical Removal, Pelletized CO₂ Blasting, Residue Treatment, On-Site Disposal
 - 22) Demolition or Mechanical Removal, Pelletized CO₂ Blasting, Off-Site Disposal
 - 23) Demolition or Mechanical Removal, Pelletized CO₂ Blasting, Residue Treatment, Off-Site Disposal

- c. Add/Modify above alternatives based on new technology developments and additional characterization information.
- d. Add new set of alternatives to address bulk waste, stored product, decontamination of facilities in place, and underground pipes/utilities remaining in service
- e. Paragraph c and d above may require adding technology types and/or process options to Chapter 3.0
- f. All alternatives will be assembled from process options

5.0 Alternative Screening Methodology

- a. Add minor changes resulting from U.S. EPA and OEPA comments (e.g. acceptability/maintainability of off-site disposal facilities)

6.0 Screening of Alternatives

- a. Add new areas to SUs, as necessary
- b. Revise SUs consistent with Section 1.0
- c. Add details on cost estimates
- d. Update areas of contamination to reflect RI information

7.0 General Summary

- a. Delete chapter

References

Modify in accordance with preceding changes

Appendices

Add and/or modify as necessary

The November 1990 ISA is used as a starting point for this outline. The information above identifies new material to be added, changes in chapter format, and/or complete rewrites as necessary.

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SUMMARY OF COMMENTS/RESPONSES

Initial Screening of Alternatives Report - Operable Unit 3
FMPC-0312-5RESPONSES TO U.S. EPA COMMENTS
REVISED OUTLINE FOR OPERABLE UNIT 3 ISA REPORT

1. Commenting Organization: U.S. EPA Commentor: Catherine A. McCord
Pg. # 1 Section 3.0 Item a Line # 7
Original Comment # 1

Comment: The outline should specify what media will be subject to physical/chemical treatment.

Response: Agree

Action: The outline has been modified to read "Physical/Chemical Soil Treatment."
2. Commenting Organization: U.S. EPA Commentor: Catherine A. McCord
Pg. # 2 Section 4.0 Item d Line #
Original Comment # 2

Comment: Adding technology types and process options at this point in the ISA report is acceptable; however, the screening process must be followed and clearly presented.

Response: Noted. The screening process will be followed and clearly presented.

Action: None required.
3. Commenting Organization: U.S. EPA Commentor: Catherine A. McCord
Pg. # 6 Section 6.0 Items a - c Line #
Original Comment # 3

Comment: The addition of new subunits at this late stage of the ISA report is confusing. These items should be considered earlier in the ISA report.

Response: Agree

Action: The outline has been modified to address the new suboperable units in Section 1.0 (see items d and e). Section 6.0 has been modified to reflect this change.